

UNITED STATES DISTRICT COURT
DISTRICT OF VERMONTJAMES D. SULLIVAN, *et al.*,
Plaintiffs,

v.

SAINT-GOBAIN PERFORMANCE
PLASTICS CORPORATION,
Defendant.

Civil No. 5:16-cv-125

**HEARING ON MOTION FOR
CLASS CERTIFICATION AND
DAUBERT MOTIONS**

Judge: Geoffrey W. Crawford, Chief Judge

Court Reporters: Sunnie Donath & Anne Henry

Dates: April 15-18, April 22-23, April 29-30, 2019

Courtroom Deputy: Pamela Lane

PLAINTIFFS' EXHIBIT LIST

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
ROBERT E. UNSWORTH			
	EXHIBITS FOR TESTIMONY ON 4/15/19		
1	Curriculum Vitae	4/15/19	x
2	Unsworth Declaration (8/31/17)	4/15/19	x
3	Expert Statement: Groundwater Damages (8/31/17) (Class Report)	4/15/19	x
4	Expert Statement: Monetary Damages (12/15/17) (Merits Report)	4/15/19	x
5	Rebuttal of Expert Report of Dr. Charles Mullin (8/1/18)	4/15/19	x
6	Rebuttal of Expert Reports of Dr. Thomas Jackson & Trevor Phillips (8/1/18)	4/15/19	x
7	Unsworth Declaration (2/13/19)	4/15/19	x
8	Summary of Results, Present Value Losses	4/15/19	x
9	Context for Using Replacement Cost	4/15/19	x
10	Approach to Replacement Cost	4/15/19	x
11	Replacement Projects	4/15/19	x

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
12	Approach to Added Costs	4/15/19	x
13	Added Cost Calculations	4/15/19	x
14	Summary of Added Cost Results, Present Value Losses	4/15/19	x
15	Map: Neighborhoods as Identified by Jackson with Phillips' Property Comparisons	4/15/19	x
16	Defendant "Bracket" Analysis Used to Support Conclusion That There is No Diminishment in Property Values, Analysis of Subject Property Number Nine	4/15/19	x
17	Defendant "Bracket" Analysis Used to Support Conclusion That There is No Diminishment in Property Values	4/15/19	x
DONALD I. SIEGEL, Ph.D.			
	EXHIBITS FOR TESTIMONY ON 4/16/19		
18	Curriculum Vitae	4/16/19	x
19	Siegel Declaration (9/1/17)	4/16/19	x
20	Expert Report: PFOA Contamination in Groundwater in North Bennington, Vermont (9/1/17) (Class Cert. Report)	4/16/19	x
21	Expert Report on the Merits (12/15/17)	4/16/19	x
22	Siegel Second Declaration (2/13/19)	4/16/19	x
23	Rebuttal & Supplemental Report Regarding Class Certification (8/1/18)	4/16/19	x
24	Expert Rebuttal Report on the Merits (8/1/18)	4/16/19	x
25	Exh. A to Second Declaration (Area of Interest Map)	4/16/19	x
26	Exh. B to Second Declaration (Groundwater Plum Map)	4/16/19	x
27	Figure 5 from Expert Report (Class Cert. Report)	4/16/19	x
28	Exh. C to Second Declaration (PFOA Air Distribution Models)	4/16/19	x
29	Figure 7, Yoder Class Cert. Report	4/16/19	x
30	Declaration of Richard Spiese including Exhibits A-E (2/14/19)	4/16/19	x
31	Figure 5 from Siegel Class Cert. Rebuttal Report	4/16/19	x
35	Ammonium Perfluorooctanoate (C-8) Groundwater Investigation Steering Team Report (Aug. 2003)	4/16/19	x

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
PHILIP K. HOPKE, Ph.D.			
	EXHIBITS FOR TESTIMONY ON 4/16/19 & 4/17/19		
36	Curriculum Vitae	4/16/19	x
37	Hopke Declaration (10/2/17)	4/16/19	x
38	Expert Report: PFOA Process Analysis in North Bennington, VT (9/1/17)	4/16/19	x
39	Hopke Merits Report (12/15/17)	4/16/19	x
40	Hopke Second Declaration (2/14/19)	4/16/19	x
41	Hopke Rebuttal Report (8/1/18)	4/17/19	x
42	Barr Table A-1, Modelling PFOA Annual Emissions Rates	4/16/19	x
43	<i>Measurement Partitioning & Near-Field Modeling of PFO in Air</i> , C.A. Barton, Summer 2008 (Barton Thesis)	4/16/19	x
44	Barton 2009, <i>Solid Vapor Pressure and Enthalpy of Sublimation for Ammonium Perfluorooctanoate</i>	4/16/19	x
45	2004 SG Testing by Barr (Excerpt)	4/16/19	x
47	Dispersion Usage for 2000 Table from Class Certification Report	4/17/19	x
48	Harvard Health Hazard Evaluation (7/13/82)	4/17/19	x
49	3M Material Safety Data Sheet re: FC-143 APFO (3/28/89)	4/17/19	x
50	Environmental One Report (6/17/85)	4/17/19	x
52	Alliance Diagnostic Test Program Results (April 1992)	4/17/19	x
53	NY Dep't of Environ. Conserv., A. Sumner Memo re: Taconic Plastics-Neighborhood Complaints (3/21/97)	4/17/19	x
54	GZA Table 1, Regulated Toxic Air Pollutant (RTAP Assessment Facility-Wide Emissions and Env-A1400 De minimis Analysis (10/3/01)	4/17/19	x
57	SPI Guide to the Safe Handling of Fluoropolymer Dispersions (Oct. 2001)	4/17/19	x
58	SPI Dispersion Processor Material Balance Project – Final Report (Feb. 2005)	4/17/19	x
59	ChemFab Interoffice Letter re: Voluntary Phase I Analysis of N. Bennington, Vt. Emissions for Qualitative Analysis & Reporting to EPA – Montpelier (2/14/86)	4/17/19	x
59A	Cavanaugh, R.J., <i>Surfactants in Dispersions, Polymerization Surfactant, Stabilization Surfactant</i> (9/15/98)	4/17/19	x

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
59B	DuPont Customer Presentation - Surfactant Changes	4/17/19	x
59C	Lines, D., et al., <i>Preparation & Properties of Some Salts of Perfluorooctanoic Acid</i> , Journal of Fluorine Chemistry, 25 (1984), 505-12	4/17/19	x
GARY T. YODER			
	EXHIBITS FOR TESTIMONY ON 4/17/19 & 4/18/19		
60	Curriculum Vitae	4/17/19	x
61	Yoder Declaration (10/2/19)	4/17/19	x
62	Expert Report: PFOA Deposition Modeling Analysis in N. Bennington (9/1/17) (Class Cert. Report)	4/17/19	x
63	Yoder Rebuttal Report (8/1/18)	4/17/19	x
64	Yoder Second Declaration with Exhibits A & B (2/13/19)	4/17/19	x
65	Figure 1, Yoder Class Cert. Report	4/17/19	x
66	Figure 2, Yoder Class Cert. Report	4/17/19	x
67	Figure 4, Yoder Class Cert. Report	4/17/19	x
68	Figure 5, Yoder Class Cert. Report	4/17/19	x
69	Figure 6, Yoder Class Cert. Report	4/17/19	x
70	Figure 7, Yoder Class Cert. Report	4/17/19	x
71	Figure 8, Yoder Class Cert. Report	4/17/19	x
72	Figure 9, Yoder Class Cert. Report	4/17/19	x
73	Figure 10, Yoder Class Cert. Report	4/17/19	x
DAVID K. MEARS			
	EXHIBITS FOR TESTIMONY ON 4/18/19		
74	Curriculum Vitae	4/18/19	x
75	Mears Expert Rebuttal Report (8/1/18)	4/18/19	x
76	Vt. Statutes & Regulations Concerning Air Pollution (Oct. 1972)	4/18/19	x
77	Vt. Statutes & Regulations Concerning Air Pollution (11/4/79)	4/18/19	x

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
78	Vt. Air Pollution Control Regulations (11/3/81)	4/18/19	x
79	Vt. Hazardous Air Contamination Guidelines (6/15/84)	4/18/19	x
80	Letter: Vt. Dep't of Environ. Conserv. to ChemFab re: Notice of Non-compliance with Air Pollution Regulations, Ref. No. 94 (7/15/74)	4/18/19	x
81	Letter: Vt. Dep't of Environ. Conserv. to ChemFab re: Assurance of Discontinuance Air Pollution (5/27/75)	4/18/19	x
82	Vt. Dep't of Environ. Conserv., Assurance of Discontinuance (12/22/75)	4/18/19	x
83	Vt. Dep't of Environ. Conserv., Assurance of Discontinuance (10/31/77)	4/18/19	x
84	Vt. Dep't of Environ. Conserv., Memo re: Chronology of Complaints About Odors From Chemical Fabrics (6/5/97)	4/18/19	x
85	Letter: Vt. Dep't of Environ. Conserv. to ChemFab (5/3/99)	4/18/19	x
86	Vt. Dep't of Environ. Conserv. Memo re: Compliance Inspection/Investig. of ChemFab Report from Chris Jones, Compliance Chief (4/13/99)	4/18/19	x
87	Vt. Dep't of Environ. Conserv. Memo re: Compliance Inspection/Investig. of ChemFab Report from Chris Jones, Compliance Chief (5/20/00)	4/18/19	x
88	Vt. Dep't of Environ. Conserv. Memo re: Compliance Inspection/Investig. of ChemFab Report from Chris Jones, Compliance Chief (11/3/99)	4/18/19	x
89	Vt. Dep't of Environ. Conserv., Telephone Memo from Skip Crego, Plant Engineer re: New Coating "Tower"; Odors (11/27/89)	4/18/19	x
90	Vt. Air Pollution Control Construction Permit (6/8/90)	4/18/19	x
91	Vt. Dep't of Environ. Conserv. Assurance of Discontinuance (3/12/99)	4/18/19	x
92	Hopke Merits, Table 1 (12/15/17)	4/18/19	x
93	Letter: Glenn Frost to North Bennington Zoning Board with Petition (7/24/86)	4/18/19	x
94	Memo: Vt. Dep't of Environ. Conserv. from Harold Garabedian re: ChemFab – Status Report (10/1/86)	4/18/19	x
95	2000-2001 ChemFab Emissions Logs	4/18/19	x
96	Vt. Dep't of Environ. Conserv. Air Pollution Inspection Report (3/25/92)	4/18/19	x
97	Memo: Vt. Dep't of Environ. Conserv. re: Compliance Inspection (9/13/93)	4/18/19	x
98	Memo: Vt. Dep't of Environ. Conserv. re: Compliance Inspection of ChemFab (3/24/94)	4/18/19	x
99	Memo: Vt. Dep't of Environ. Conserv. re: Compliance Inspection of ChemFab (8/29/95)	4/18/19	x
100	Memo: Vt. Dep't of Environ. Conserv. re: Compliance Inspection of ChemFab (5/14/96)	4/18/19	x

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
101	Letter: Vt. Dep't of Environ. Conserv. from Richard Valentinetti re: Compliance Inspection of ChemFab (2/27/98)	4/18/19	x
102	Memo: Vt. Dep't of Environ. Conserv. re: Compliance Inspection of ChemFab (2/19/99)	4/18/19	x
103	Memo: Vt. Dep't of Environ. Conserv. re: Compliance Inspection of ChemFab (4/13/99)	4/18/19	x
104	Memo: ChemFab from MacDonald to O'Leary re: Smoke, (5/21/80)	4/18/19	x
105	Memo: ChemFab from Henningsen to O'Leary re: Neighbor Complaint (8/15/83)	4/18/19	x
106	Memo: ChemFab from Plante to Tilgner re: Weekly Update (10/14/83)	4/18/19	x
107	Memo: Vt. Dep't of Environ. Conserv. re: Compliance Inspection/Investigation of ChemFab (5/5/00)	4/18/19	x
108	Letter: ChemFab to Vt. Dep't of Environ. Conserv. enclosing Engelhard VOC Catalyst Test Report (12/15/00)	4/18/19	x
109	Memo: ChemFab re: Plant Technical Meeting Minutes (12/23/82)	4/18/19	x
110	Memo: ChemFab from Richard DeMeis re: Process Air Emissions Meeting Minutes (6/6/84)	4/18/19	x
111	Memo: ChemFab from Raymond DeMeis re: Meeting w/VT AEC concerning North Bennington Odor Control (9/24/84)	4/18/19	x
112	Letter: T. Jerry Linton, DuPont to ChemFab with Paul Jann's report on odor survey (8/21/84)	4/18/19	x
113	ChemFab Interoffice Ltr from E. Reynolds re: Testing in N. Bennington, VT of Decomposition Products of Fluorocarbon Polymers (7/2/85)	4/18/19	x
114	Letter: ChemFab to Galson Technical Services re: air sampling program (7/18/85)	4/18/19	x
115	ChemFab Interoffice Letter from J. Effenberger re: Voluntary Phase I Analysis of N. Bennington, VT Emissions for Qualitative Analysis & Reporting to EPA – Montpelier, VT (2/14/86)	4/18/19	x
116	Letter: Vt. Dep't of Environ. Conserv. to ChemFab re: TRC test on New Tower R required by Condition 10 of permit (11/1/99)	4/18/19	x
117	NY Dep't of Environ. Conserv. Memo from Arline Sumner re: Taconic Plastics-Neighborhood Complaints (3/21/97)	4/18/19	x
118	Vt. Dep't of Environ. Conserv. Memo from Brian Fitzgerald re: NY Dep't of Environ. Conserv. (3/19/97)	4/18/19	x
119	3M Memo of Phaseout (5/16/00)	4/18/19	x
120	2001 SG APFO Reformulation Project	4/18/19	x
121	Air Pollution Control Construction Permit #AP-90-007a (Tower P) (6/27/93)	4/18/19	x
122	Amended Air Pollution Control Permit #AP-90-007b (13 towers + Tower Q) (3/19/96)	4/18/19	x

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
123	Amended Air Pollution Control Permit #AP-90-007c (clerical amendment to correct fuel limit in 007b) (5/28/96)	4/18/19	x
124	Air Pollution Control Permit to Construct #AP-90-007d (for R1 & R2) (11/24/98)	4/18/19	x
125	Air Pollution Control Permit to Construct #AP-90-007e (for Tower H) (8/29/00)	4/18/19	x
126	ChemFab's Application for Air Pollution Operating Permit (4/10/96)	4/18/19	x
PHILIPPE GRANDJEAN, MD, MDSc			
	EXHIBITS FOR TESTIMONY ON 4/22/19		
127	Curriculum Vitae	4/22/19	x
128	Grandjean Rebuttal Report (8/1/18)	4/22/19	x
ALAN M. DUCATMAN, M.D.			
	EXHIBITS FOR TESTIMONY ON 4/22/19 & 4/23/19		
130	Vt. Dep't of Health, Environmental Health: <i>Exposure to PFOA in Bennington and North Bennington, Vermont</i> (Sept. 2017)	4/23/19	x
135	Curriculum Vitae	4/23/19	x
136	Ducatman Class Cert. Report (9/1/17)	4/23/19	x
137	Ducatman Declaration (7/7/17)	4/23/19	x
138	Ducatman Merits Report (12/15/17)	4/23/19	x
139	Ducatman Rebuttal Report (8/1/18)	4/23/19	x
143	Exh. C from Ducatman Rebuttal Report, Class Rep. Deposition Excerpts	4/23/19	x
144	ATSDR Medical Monitoring Under CERCLA, Fed. Reg., Vol. 60, No. 145 (7/28/95)	4/23/19	x
146	Steenland, <i>Association of PFOA & PFOS with Serum Lipids Among Adults Living Near a Chemical Plant</i> (10/21/09)	4/23/19	x
PHILIP GUZELIAN, MD (DEFENSE WITNESS)			
	EXHIBITS FOR CROSS EXAMINATION ON 4/29/19		
147	Guzelian Deposition re: <i>Rowe v. E.I. DuPont de Nemours & Co.</i> (12/11/09)	4/29/19	x

NO.	DESCRIPTION OF EXHIBIT	OFFERED	ADMITTED
152	Philip Morris, USA Inter-Office Memo re: Philip Guzelian (6/22/88)	4/29/19	x
157	Letter: King & Spalding to Minnesota Mining & Manufacturing re: SOT Workshop on PFOS (5/25/02)	4/29/19	x
160	Guzelian Invoice to Quinn Emanuel for services through 5/15/17	4/29/19	x
161	Guzelian Invoice to Quinn Emanuel for services through 1/31/18	4/29/19	x
162	Guzelian Invoice to Quinn Emanuel for services through 4/30/18	4/29/19	x
163	Guzelian, P., <i>Clear Path: Towards an Evidence-Based Toxicology (EBT)</i> , Human & Experimental Toxicology, 28: 71-79 (2009)	4/29/19	x
168	EPA: Drinking Water Health Advisory for PFOA (May 2016)	4/29/19	x
169	ATSDR: Toxicological Profile for Perfluoroalkyls, Draft for Public Comment (June 2018)	4/29/19	x
171	CDC: Fourth National Report on Human Exposure to Environ. Chemicals, Updated Tables, Vol. One (Jan. 2019)	4/29/19	x
183	Ruden, C., <i>Evidence-Based Toxicology: "Sound Science" in New Disguise</i> , Int'l J. Occup. Environ. Health 2008, 14: 299-306	4/29/19	x
186	Weinberg Group letter to DuPont de Nemours & Co. re: PFOA (4/29/03)	4/29/19	x

SORELL SCHWARTZ, PH.D. (DEFENSE WITNESS)

	EXHIBITS FOR CROSS-EXAMINATION ON 4/30/19		
174	<i>Kirk v. Schaeffler Group USA, Inc.</i> , 2015 WL 12426834 (W.D. Mo. Sept. 29, 2015)	4/30/19	x
185	<i>U.S. v. Philip Morris USA, Inc.</i> , 449 F. Supp. 2d 1 (2006), Excerpt	4/30/19	x

CHARLES MULLIN, PH.D. (DEFENSE WITNESS)

	EXHIBITS FOR CROSS-EXAMINATION ON 4/30/19		
187	National Research Council 1997, <i>Valuing Ground Water: Economic Concepts and Approaches</i> ,	4/30/19	x
188	Fed. Reg. 57235, Vol. 73, No. 192 (10/2/08), Excerpts	4/30/19	x